

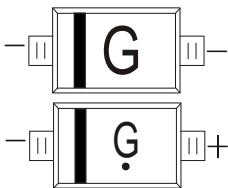
## Plastic-Encapsulate Diodes

High Speed Switching Diode

### FEATURES

- Small surface mounting type
- High speed
- High reliability with high surge current handling capability

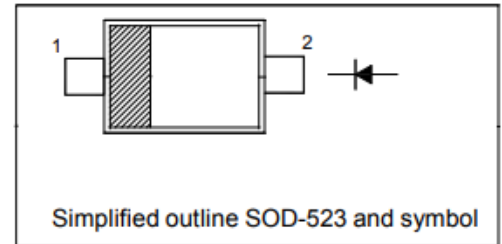
### MARKING: G



The marking bar indicates the cathode  
Solid dot = Green molding compound device,  
if none, the normal device.

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



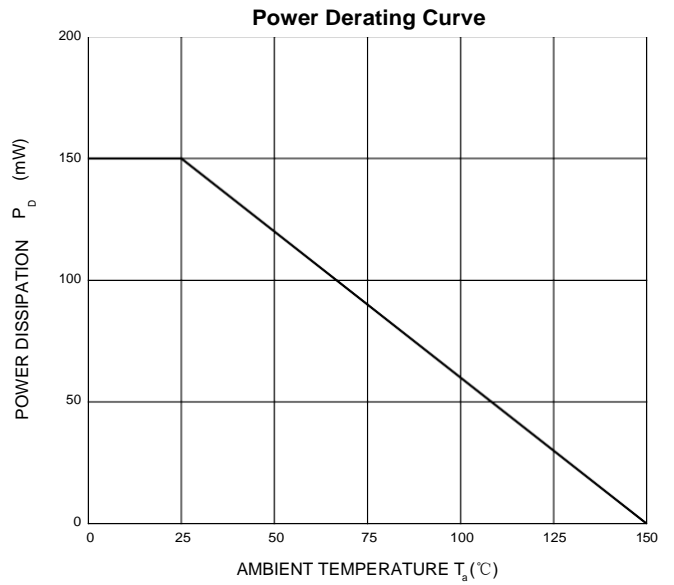
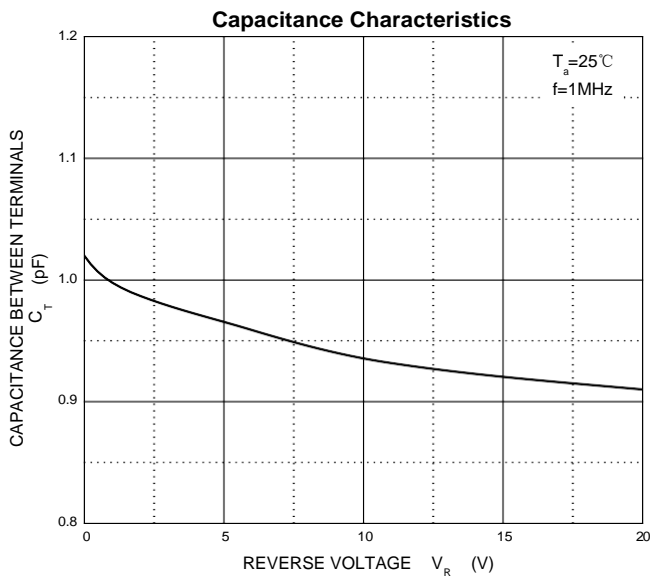
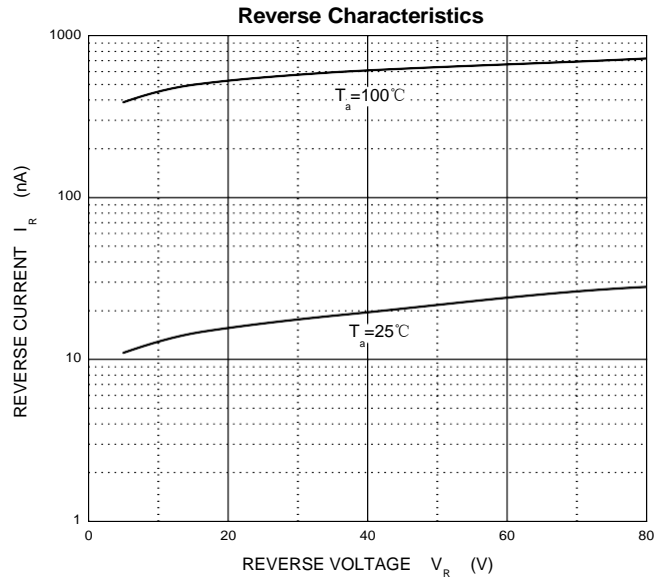
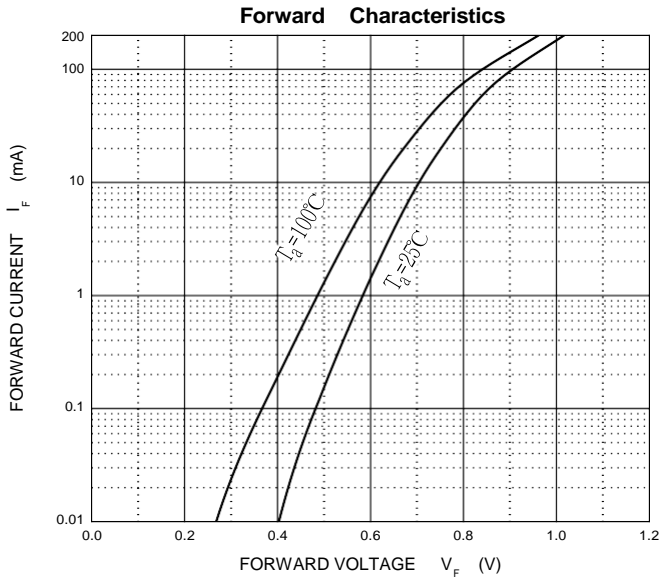
### Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	85	V
DC Blocking Voltage	$V_R$	80	V
Forward Continuous Current	$I_{FM}$	200	mA
Average Rectified Output Current	$I_o$	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	2.0	A
Power Dissipation	$P_d$	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{STG}$	-55~+150	°C

### Electrical Ratings @Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$		0.62		V	$I_F=1mA$
	$V_{F2}$		0.75		V	$I_F=10mA$
	$V_{F3}$			1.2	V	$I_F=100mA$
Reverse current	$I_{R1}$			0.1	μA	$V_R=30V$
	$I_{R2}$			0.5	μA	$V_R=80V$
Capacitance between terminals	$C_T$			3.0	pF	$V_R=0, f=1MHZ$
Reverse recovery time	$t_{rr}$			4	ns	$V_R=6V, I_F=10mA, R_L=100\Omega$

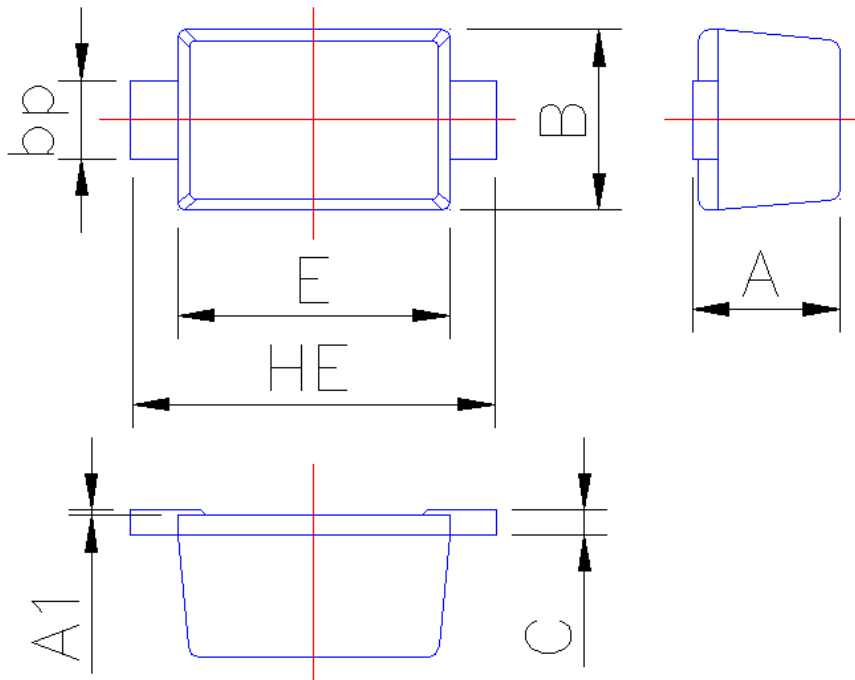
## Typical Characteristics



### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.70
A1	0	0.05
B	0.75	0.85
bp	0.25	0.40
C	0.09	0.15
E	1.15	1.25
HE	1.50	1.70